Please add the following new claims:

- 39. The fusion protein according to claim 1 wherein at least two of said heavy chain CDRs are selected from the group consisting of:
 - (a) ThrSerGlyMetGlyValSer: SEQ ID NO:22,
 - (b) HisIleTyrTrpAspAspAspLysArgTyrAsnProSerLeuLysSer: SEQ ID NO:24, and
 - (c) ArgGluThrValPheTyrTrpPheAspVal: SEQ ID NO:26.
- 40. The fusion protein according to claim 1 wherein at least two of said light chain CDRs are selected from the group consisting of:
 - (a) LysAlaSerGlnSerValAspTyrAspGlyAspSerTyrMetAsn: SEQ ID NO:16,
 - (b) AlaAlaSerAsnLeyGluSer, SEQ ID NO:18,
 - (c) GlnGlnSerAsnGluAspRroProArg: SEQ ID NO:28, and
 - (d) GlnGlnSerAsnGluAspProProThr: SEQ ID NO:20.

REMARKS

Claims 1-11, 14-18 and 30 - 40 are pending in the application. Claims 1 - 2, 4 - 11, 14, 16, 30 - 32 and 37 have been amended. New claims 39 - 40 have been presented. Claims 12-13 and 19-29 have been canceled, without prejudice. No new matter has been added.

The Examiner has required restriction between the following groups:

Group I: claims 1 - 11, 14 - 18, and 30 - 38, drawn to a fusion protein and methods of using said protein; and

Group II: claims 12 - 13 and 19 - 29, drawn to nucleic acid sequences.

Applicants elect group I, claims 1 - 11, 14 - 18 and 30 - 38, for further prosecution on the merits. Applicants retain the right to file divisional applications on the non-elected subject matter.

Provisional Double Patenting Rejection

Claims 1 - 11, 14 - 17, 30 and 32 - 38 were provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 - 11, 14 - 17, 30 and 32 - 38 of co-pending Application Serial No. 08/483,636. It is submitted that, prior to patent issuance, any conflicting claims remaining in the applications will be canceled or amended.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 3 and 37 - 38 were rejected under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter which is not enabled by the specification. As set forth in the specification on page 32, it is noted that hybridoma cell line 342A11C1B9 was deposited under the provisions of the Budapest Treaty. Pursuant to 37 C.F.R. § 1.808(b), it is hereby stated that subject to 37 C.F.R. §1.808(b), all restrictions upon public access to the deposited material will be irrevocably removed upon the grant of a patent on this application.

Claims 17 - 18 were rejected under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter which is not enabled by the specification. In particular, the Examiner alleges that the specification does not provide sufficient guidance to enable one of skill in the art to use fusion proteins (antibodies) to treat allergies and other conditions associated with excess IgE production. This rejection is respectfully traversed.

The specification is replete with description and data which describes the role of IL4 antagonists and which shows the action and characteristics of the claimed fusion proteins. In particular, the Examiner is directed, *inter alia*, to pages 1, 21 - 23 and 32 - 37 of the specification. Moreover, it is well settled that *in vitro* data is sufficient to support claims directed to *in vivo* treatment as long as there is a reasonable correlation between the *in vitro* data and the *in vivo* claims. One of skill in the art reading the specification in combination with that which is known in the art would be able to make fusion proteins in accordance with present invention and to use these proteins to treat individuals suffering from allergies and other conditions associated with excess IgE production. As such, it is respectfully requested that this rejection be withdrawn.

Therefore, it is believed that all of the issues raised by the Examiner have been addressed and it is respectfully requested that these rejections be withdrawn.

35 U.S.C. § 102

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Claims 1, 8 - 9, 11 and 17 were rejected under 35 USC §102(a) as being anticipated by WO 93/04173. Claims 1 - 2, 4, 8 - 9, 11, 14 and 16 - 17 were rejected under 35 USC §102(b) as being anticipated by EP 327000. Claim 11 was rejected under 35 USC §102(b) as being anticipated by Loh et al. Claims 1 - 4, 7 and 10 were rejected under 35 USC §102(b) as being anticipated by Perfetti et al. Although these rejections are respectfully traversed, it is submitted that the claims, as presently written, are free from these rejections and it is requested that these rejections be withdrawn.

Claims 1 - 4, 14 - 17, 31 - 34 and 36 were rejected under 35 USC §102(b) as being anticipated by WO 93/17106. Claim 33 was rejected under 35 USC §102(b) as being anticipated by Ramanathan et al. This rejection is respectfully traversed for the reasons set forth below.

Among the features of the present invention which Ramanathan et al. or WO 93/17106 fail to disclose or suggest are a neutralizing antibody or an antibody with a dissociation constant equal to or less than 2 x 10⁻¹⁰. The Examiner has merely asserted that these would be inherent characteristics of the disclosed antibodies. However, the Examiner has provided no basis in fact and/or technical reasoning to support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the prior art. MPEP 2112. In the absence of such basis or reasoning, it is submitted that the Examiner has failed to meet her burden and as such, it is respectfully requested that this rejection be withdrawn. Further, it is submitted that the Examiner's assertion that most monoclonal antibodies have affinity constants of 2 x 10⁻¹⁰ M or less is not supported by the teachings in the art. As such, it is respectfully requested that the Examiner cite a reference or provide a declaration to support this assertion. MPEP 2144.03

Claims 30 and 33 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP-327725. This rejection is respectfully traversed in that JP-327725 fails to teach or suggest an antibody with a dissociation constant equal to or less than 2×10^{-10} M. Moreover, as to claim 30, JP 327725 is limited to a method of determining the level of IL-4 in a sample and fails to

teach or suggest a <u>diagnostic</u> method or that such a method is useful for identifying patients with allergies or excess IgE production. As such, it is respectfully requested that this rejection be withdrawn.

Claim 33 was rejected under 35 U.S.C. § 102(b) as being anticipated by Chretien et al. This rejection is respectfully traversed in that Chretien et al. fail to teach or suggest an antibody with a binding affinity as is claimed. As discussed above with regard to the Ramanathan reference, the Examiner is respectfully requested to point to a basis in the reference and/or to provide technical reasoning which supports her determination.

Claims 1 and 32 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Ramanathan et al. or JP-327725 or Chretien et al. These rejections are respectfully traversed for the reasons set forth above.

35 U.S.C. § 103

Claims 1 - 4, 14 - 17, 30 - 34 and 36 were rejected under 35 U.S.C. § 103 as being unpatentable over Queen et al. in view of Abrams et al., Chretien et al. and Curtis et al. Claim 31 was rejected under § 103 as allegedly being unpatentable over WO 91/09059 or Chretien et al. These rejections are respectfully traversed for the reasons set forth below.

It is submitted that the references cited by the Examiner, no matter how combined, do not teach or suggest the present invention. In particular, as discussed above, the cited references fail to teach or suggest a high affinity, neutralizing IL4 antagonist, as claimed.

The Queen reference fails to remedy the deficiencies of the other references cited by the Examiner. This reference is limited to general techniques and does not suggest the aspects of the claims which make the constructs patentable. Particularly, this reference fails to disclose or suggest high affinity, neutralizing IL4 antagonists or the portion of the claimed antibodies which contribute to the high affinity thereof.

As to the rejection of claim 31 over WO 91/09059 or Chretien et al., this rejection is respectfully traversed in that these references fail to teach or suggest a method of screening for monoclonal antibodies which have high titer for human IL-4 wherein the human IL-4 is not

denatured during the screening, as is claimed. As such, it is respectfully requested that this rejection be withdrawn.

In light of the above arguments and amendments, it is submitted that all of the claims are in condition for full and complete allowance and therefore, such action is respectfully requested.

If there are any amendments or issues the Examiner wishes to discuss, she is encouraged to contact the undersigned by telephone.

Respectfully submitted,

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